

PART Y OCCUPATIONAL HEALTH STANDARDS

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WAC 296-307-550 Employer chemical hazard communication-Introduction.

Important:

Thousands of chemicals can be found in today's workplaces. These chemicals may have the capacity to cause health problems, from minor skin irritations to serious injuries or diseases like cancer.

The employer chemical hazard communication rule was developed to make sure employers and employees are informed about chemical hazards in the workplace.

This rule applies to:

- Employers engaged in businesses where chemicals are used, distributed, or produced for use or distribution.
- Contractors or subcontractors that work for employers engaged in businesses where chemicals are used, distributed, or produced for use or distribution.

WAC 296-307-550 (Cont.)*Note:*

- If you produce, import, distribute and/or repackage chemicals, or choose not to rely on labels or material safety data sheets provided by the manufacturer or importer, you must comply with Chemical hazard communication for manufacturers, importers and distributors, WAC 296-62-054.
- You may withhold trade secret information under certain circumstances, see Trade secrets, WAC 296-62-053, to find out what information may be withheld as a trade secret and what information must be released.

Exemptions:

- For the purposes of this employer hazard communication rule, if you are engaged in agricultural production of crops or livestock, employee doesn't mean:
 - Immediate family members of the officers of any corporation, partnership, sole proprietorship or other business entity or officers of any closely held corporation.
- Certain products, chemicals, or items are exempt from this rule. Below is a summarized list of these exemptions. See WAC 296-307-55055 at the end of this rule to get complete information about these exemptions:
 - Any hazardous waste or substance
 - Tobacco or tobacco products
 - Wood or wood products that aren't chemically treated and will not be processed, for example, by sawing and sanding
 - Food or alcoholic beverages
 - Some drugs, such as retail or prescription medications
 - Retail cosmetics
 - Ionizing and nonionizing radiation
 - Biological hazards
 - Any consumer product or hazardous substance when workplace exposure is the same as that of a consumer
 - ♦ Retail products used in offices in the same manner and frequency used by consumers can be termed consumer products. Consumer products include things such as: Correction fluid, glass cleaner, and dishwashing liquid.

Example: If you use a household cleaner in your workplace in the same way that a consumer would use it when cleaning their house, the exposure should be the same as the consumer's. (In the same way means using the household cleaner in the same manner and frequency.) A janitor using a household cleaner, such as bleach, throughout the day, isn't considered to be consumer use.

- Manufactured items that remain intact are exempt for this rule.

The following are examples:

Item	Covered by this rule	Not covered by this rule
Brick	sawed or cut in half	used whole or intact
Pipe	cut by a torch	bent with a tube bender
Nylon rope	burning the ends	tying a knot

WAC 296-307-550 (Cont.)

- Manufactured items that are fluids or in the form of particles aren't exempt for this rule.

Your responsibility:

- To inform and train your employees about the hazards of chemicals they may be exposed to during normal working conditions, or in foreseeable emergencies by:
 - Making a list of the hazardous chemicals present in your workplace
 - Preparing a written Chemical Hazard Communication Program for your workplace
 - Informing your employees about this rule and your program
 - Providing training to your employees about working in the presence of hazardous chemicals
 - Getting and keeping the material safety data sheets (MSDSs) for the hazardous chemicals
 - Making sure that labels on containers of hazardous chemicals are in place and easy to read

You must:

Develop, implement, maintain, and make available a written Chemical Hazard Communication Program.

WAC 296-307-55005.

Identify and list all the hazardous chemicals present in your workplace.

WAC 296-307-55010.

Obtain and maintain material safety data sheets (MSDSs) for each hazardous chemical used.

WAC 296-307-55015.

Make sure that material safety data sheets (MSDSs) are readily accessible to your employees.

WAC 296-307-55020.

Label containers holding hazardous chemicals

WAC 296-307-55025.

Inform and train your employees about hazardous chemicals in your workplace.

WAC 296-307-55030.

Follow these rules for laboratories using hazardous chemicals.

WAC 296-307-55035.

Follow these rules for handling chemicals in factory sealed containers.

WAC 296-307-55040.

The department must:

Translate certain chemical hazard communication documents upon request.

WAC 296-307-55045.

Attempt to obtain a material safety data sheet (MSDS) upon request.

WAC 296-307-55050.

Exemption: Items or chemicals exempt from the rule, and exemptions from labeling.

WAC 296-307-55055.

Definitions.

WAC 296-307-55060.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-550, filed 08/08/01, effective 09/01/01.]

WAC 296-307-55005 Develop, implement, maintain, and make available a written Chemical Hazard Communication Program.

You must:

- Develop, implement, maintain, and make available a written Chemical Hazard Communication Program specifically for your workplace. The Chemical Hazard Communication Program must, at a minimum, include:

WAC 296-307-55005 (Cont.)

- A list of hazardous chemicals known to be present in your workplace
- Procedures for making sure all containers are properly labeled
- A description of how you are going to obtain and maintain your material safety data sheets (MSDSs)
- A description of how you are going to train and inform your employees about hazardous chemicals in their workplace
- A description of how you are going to inform your employees about:
 - ◆ Chemical hazards used during nonroutine tasks
 - ◆ The hazards associated with chemicals contained in unlabeled pipes in their work areas

You must:

- Make sure your written Chemical Hazard Communication Program includes the following communication methods you will apply if you produce, use, or store hazardous chemicals at your workplace(s) in such a way that the employees of other employer(s) may be exposed:
 - Provide the other employer(s) with a copy of the relevant material safety data sheets (MSDSs), or provide access to the MSDSs in a central location at the workplace
 - Inform the other employer(s) of any precautionary measures that need to be taken to protect employees during normal operating conditions and in foreseeable emergencies
 - Describe how to inform the other employer(s) of the labeling system used in the workplace

Note:

- Examples of employees of other employers who could be exposed to chemical hazards that you produce, use, or store in your workplace include employees of construction companies, cleaning services, or maintenance contractors visiting or working on-site.
- Your employees have the right to get chemical hazard communication information from other employers at workplaces where they are working; and employees of other employers have the right to get the information from you when they are working at your workplace.
- Include in your written Chemical Hazard Communication Program the methods that you will use to share information with other employers and their employees at your workplace(s) regarding:
 - Access to MSDSs
 - Precautionary measures such as personal protective equipment (PPE) and emergency - plans
 - Any labeling systems used at the workplace.

If you rely on another employer's chemical hazard communication program to share the information required and the program meets the requirements of this rule, document in your own written Chemical Hazard Communication Program.

You must:

- Make your Chemical Hazard Communication Program available to your employees.

Note: Where employees must travel between workplaces during a workshift, that is, if their work is carried out at more than one geographical location, the written Chemical Hazard Communication Program may be kept at the primary workplace facility.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-55005 filed 08/08/01, effective 09/01/01.]

WAC 296-307-55010 Identify and list all the hazardous chemicals present in your workplace.

You must:

- Identify all hazardous chemicals in your workplace. This includes any chemical that is known to be present in your workplace in such a way that employees may be exposed to it under normal conditions of use or in a foreseeable emergency.
- Create a list of these chemicals using the chemical or common name on the material safety data sheet (MSDS). This list:
 - Must be compiled for the workplace as a whole, or for individual work areas.
 - Is necessary to make sure that all hazardous chemicals are identified and that MSDS, and labeling rules are met.
 - Must be current.

Note: The following are some ways to determine whether a product is hazardous:

- Look for words on the label, such as CAUTION, WARNING, or DANGER.
- Look for words or hazard coding that indicate that the chemical is flammable, an irritant, corrosive, carcinogenic, etc. Hazard coding refers to words, numbers, or colors that tell you a chemical is dangerous.
- Check the product's MSDS for hazard information.

Examples of hazardous chemicals are: Acids, adhesives, caustics, fuels, paints, varnishes, shellacs and pesticides. Too many other classes of hazardous chemicals exist to list them all here. If you have any questions about a chemical you have at your workplace, contact your local L&I office.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-55010, filed 08/08/01, effective 09/01/01.]

WAC 296-370-55015 Obtain and maintain material safety data sheets (MSDSs) for each hazardous chemical used.

You must:

- Obtain a MSDS for each hazardous chemical used as soon as possible if the MSDS isn't provided with the shipment of a hazardous chemical from the chemical manufacturer or importer.

Note:

- To obtain a MSDS, you may try calling the manufacturer or checking their website.
- If you have a commercial account with a retailer or wholesaler, you have the right to request and receive a MSDS about hazardous chemicals you purchase.
- If a chemical is purchased from a retailer with no commercial accounts, you have the right to request and receive the manufacturer's name and address so that you can contact them and request a MSDS for the chemical.
- Whoever prepares the MSDS is required to mark all blocks on the form, even if there is no relevant information for that section.
- If you have problems getting a MSDS within 30 calendar days after making a written request to the chemical manufacturer, importer, or distributor, you can get help from WISHA. You may contact your local regional office for assistance or make a written request for assistance to the:

Department of Labor and Industries
Right-to-Know Program
P.O. Box 44610
Olympia, Washington 98504-4610

WAC 296-307-55015 (Cont.)

- Include in your request:
 - A copy of the purchaser's written request to the chemical manufacturer, importer, or distributor
 - The name of the product suspected of containing a hazardous chemical
 - The identification number of the product, if available
 - A copy of the product label, if available
 - The name and address of the chemical manufacturer, importer, or distributor from whom the product was obtained

You must:

- Maintain a MSDS for each hazardous chemical:
 - Keep copies of the required MSDSs for each hazardous chemical present in your workplace. These may be kept in any form, including as a part of operating procedures.
 - Each MSDS must be in English. You may also keep copies in other languages.

Note:

- If you choose not to rely on MSDSs or labels provided by the manufacturer or importer, you must comply with the chemical hazard communication standard for manufacturers, importers, and distributors, WAC 296-62-054.
- It may be more appropriate to address the hazards of a process rather than individual hazardous chemicals. MSDSs can be designed to cover groups of hazardous chemicals in a work area.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-55015, filed 08/08/01, effective 09/01/01.]

WAC 296-307-55020 Make sure material safety data sheets are readily accessible to your employees.

You must:

- Make sure that MSDSs are readily accessible, easily obtained without delay during each work shift to employees when they are in their work area(s).
- Make sure that employees, who must travel between workplaces during a work shift, such as when their work is carried out at more than one geographical location, can immediately obtain the required MSDS information in an emergency. (MSDSs may be kept at a central location at the primary workplace facility and accessed by means such as voice communication or laptop computer.)

Note:

- Electronic access (such as computer or fax), microfiche, and other alternatives to maintaining paper copies of the MSDSs are permitted as long as they don't create barriers to immediate employee access in each workplace.
- Barriers to immediate access of electronic MSDSs may include:
 - Power outages
 - Equipment failure
 - System delays
 - Deficient user knowledge to operate equipment

WAC 296-307-55020 (Cont.)

- Location of equipment outside the work area
- Solutions to eliminating these and other possible barriers to access may require the availability of back-up systems, employee training, and providing access equipment in the work areas.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-55020, filed 08/08/01, effective 09/01/01.]

WAC 296-307-55025 Label containers holding hazardous chemicals.

Exemptions: The following is a summary of items that are exempt from this rule. For complete information about each of these, see WAC 296-307-55055.

- Pesticides, when labeled as required by the Environmental Protection Agency (EPA)
- Food, food additives, color additives, drugs, cosmetics, or medical/veterinary devices or products
- Alcoholic beverages not intended for industrial use
- Consumer products labeled, as required, by the Consumer Product Safety Commission
- Agriculture or vegetable seeds treated and labeled as required by the Federal Seed Act

Note: You aren't required to label portable containers into which hazardous chemicals are transferred from labeled containers, if the *chemical is used and controlled by the employee who performed the transfer* within the same shift.

You must:

- Make sure that each container of hazardous chemicals in the workplace is labeled, tagged, or marked with the following information:
 - The identity of the hazardous chemical(s) using either the chemical or common name

Note: You aren't required to list each component in a hazardous mixture on the label. If a mixture is referred to on a material safety data sheet (MSDS) by a product name, then the product name should be used as the identifier.

- Appropriate hazard warnings which give general information about the relevant health and physical hazards of the chemicals. This includes health effects information, such as information about organs most likely to be affected by the chemicals.

Example of Label:

Name of Chemical
Physical Hazards
Health Hazards:
<ul style="list-style-type: none">• Health effects information• Affected Target Organs

- For individual stationary process containers, you may use alternate labeling methods such as:

WAC 296-307-55025 (Cont)

- ◆ Signs
- ◆ Placards
- ◆ Process sheets
- ◆ Batch tickets
- ◆ Operating procedures or
- ◆ Other such written materials, as long as the alternate method identifies the containers and conveys the required label information.

Note:

- You may use words, pictures, symbols or any combination to communicate the hazards of the chemical. Be sure to train your employees so they can demonstrate a knowledge of the labeling system you use.



- Some alternative labeling systems don't communicate target organ information, so the employee will have to rely on training provided *by the employer to obtain this information*.

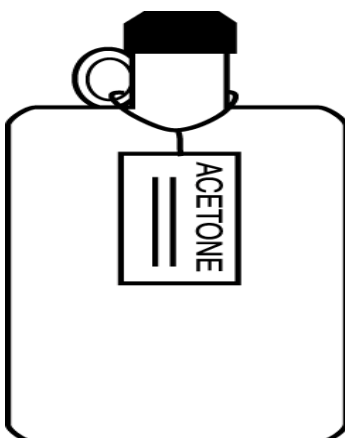
You must:

- Not remove or deface existing labels on incoming containers of hazardous chemicals (such as those marked with United States Department of Transportation (USDOT) markings, placards, and labels), unless the container is immediately labeled with the required information. You don't need to put on new labels if existing labels already provide the required information. If the package or container is sufficiently cleaned of residue and purged of vapors to remove any potential health or physical hazard, existing labels can be removed.
- Make sure that labels or other forms of warning are legible, in English, and prominently displayed on the container, or readily available in the work area throughout each work shift.

Note:

- Employers with non-English speaking employees may use other languages in the warning information in addition to the English language.

WAC 296-307-55025 (Cont.)



- Above is an example of a labeled container. You may use a laminated or coated label, affixed to the container with a wire, to avoid deterioration of labels due to a solvent, such as acetone.

You must:

- Make sure if the hazardous chemical is regulated by WISHA or OSHA in a substance-specific health rule, that the labels or other warnings are used according to those rules.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-55025, filed 08/08/01, effective 09/01/01.]

WAC 296-307-55030 Inform and train your employees about hazardous chemicals in your workplace.

Note: The employer chemical hazard communication information and training requirements also apply to pesticides. Employers who have employees who are exposed to pesticides must be in compliance with this rule and the worker protection standards, WAC 296-307-12040.

You must:

- Provide employees with effective information on hazardous chemicals in their work area at the time of their initial job assignment. Whenever a new physical or health hazard related to chemical exposure is introduced into their employees' work areas, information must be provided.
 - Inform employees of:
 - ♦ The requirements of this rule.
 - ♦ Any operations in their work area where hazardous chemicals are present.
 - ♦ The location and availability of your written Chemical Hazard Communication Program, including the list(s) of hazardous chemicals and material safety data sheets (MSDSs) required by this rule.
- Provide employees with effective training about hazardous chemicals in their work area at the time of their initial job assignment. Whenever a new physical or health hazard related to chemical exposure is introduced, the employees must be trained.
- Make sure that employee training includes:

WAC 296-307-55030 (Cont.)

- Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area. Examples of these methods and observations may include:
 - ◆ Monitoring conducted by you
 - ◆ Continuous monitoring devices
 - ◆ Visual appearance or odor of hazardous chemicals when being released
- Physical and health hazards of the chemicals in the work area, including the likely physical symptoms or effects of overexposure
- Steps employees can take to protect themselves from the chemical hazards in your workplace, including specific procedures implemented by you to protect employees from exposure to hazardous chemicals. Specific procedures may include:
 - ◆ Appropriate work practices
 - ◆ Engineering controls
 - ◆ Emergency procedures
 - ◆ Personal protective equipment to be used
- Details of the Chemical Hazard Communication Program developed by you, including an explanation of the labeling system and the MSDS, and how employees can obtain and use the appropriate hazard information.
- Tailor information and training to the types of hazards to which employees will be exposed. The information and training may be designed to cover categories of hazards, such as flammability or cancer-causing potential, or it may address specific chemicals. Chemical-specific information must always be available through labels and MSDSs.
- Make reasonable efforts to post notices in your employees' native languages (as provided by the department) if those employees have trouble communicating in English.

Note:

- Interactive computer-based training or training videos can be used provided they are effective.
- Your MSDSs may not have WISHA permissible exposure limits (PELs) listed. In some cases, WISHA PELs are stricter than the OSHA PELs and other exposure limits listed on the MSDSs you receive. If this is the case, you must refer to the WISHA PEL table, WAC 296-62-075, for the appropriate exposure limits to be covered during training.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-55030, filed 05/06/03, effective 08/01/03. Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-55030, filed 08/08/01, effective 09/01/01.]

WAC 296-307-55035 Follow these rules for laboratories using hazardous chemicals.

Note: Laboratories are required to have a written Chemical Hygiene Plan under WAC 296-62-400, if applicable. They aren't required to have a written Chemical Hazard Communication Program. You may combine your Accident Prevention Program and Chemical Hazard Communication Program to assist you in developing a Chemical Hygiene Plan for your laboratory.

You must:

- (1) Make sure that labels on incoming containers of hazardous chemicals are in place and readable.

WAC 296-307-55035 (Cont.)

- (2) Maintain material safety data sheets (MSDSs) received with incoming shipments of hazardous chemicals and make them available to laboratory employees when they are in their work areas.
- (3) Provide laboratory employees with information and training as described in: Inform and train your employees about hazardous chemicals in your workplace, WAC 296-307-55030, except for the part about the location and availability of the written Chemical Hazard Communication Program.

Note: Laboratory employers that ship hazardous chemicals are considered to be either chemical manufacturers or distributors. When laboratory employers ship hazardous chemicals they must comply with the rule, Hazard communication standards for chemical manufacturers, importers and distributors, WAC 296-62-054.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-55035, filed 08/08/01, effective 09/01/01.]

WAC 296-307-55040 Follow these rules for handling chemicals in factory-sealed containers.

You must:

This applies to situations where employees only handle chemicals in factory-sealed containers that aren't opened under normal use (such as those found in marine cargo handling, trucking, warehousing, or retail sales).

You must:

- (1) Make sure that labels on incoming containers of hazardous chemicals are in place and readable.
- (2) Keep or obtain material safety data sheets.
 - Keep any MSDSs that are received with incoming shipments of the sealed containers of hazardous chemicals
 - If a factory-sealed container of hazardous chemicals comes without a MSDS, obtain one as soon as possible, if an employee requests it
- (3) Make sure that the MSDSs are readily accessible during each work shift to employees when they are in their work area(s).
- (4) Inform and train your employees about hazardous chemicals in your workplace, to protect them in case of a hazardous chemical spill or leak from a factory-sealed container. You don't have to cover the location and availability of the written Chemical Hazard Communication Program.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-55040, filed 08/08/01, effective 09/01/01.]

WAC 296-307-55045 Translate certain chemical hazard communication documents upon request.

The department must:

- Upon receipt of a written or verbal request, prepare and make available (within available resources) to employers or the public, a translation into Cambodian, Chinese, Korean, Spanish, or Vietnamese of any of the following:
 - An employer's written Chemical Hazard Communication Program
 - A material safety data sheet or
 - Written materials prepared by the department to inform employees of their rights described in this rule, regarding chemical hazard communication

WAC 296-307-55045 (Cont.)

Note: Written requests for translations should be directed to:

Department of Labor and Industries
Right-to-Know Program
P.O. Box 44610
Olympia, Washington 98504-4610

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-55045, filed 08/08/01, effective 09/01/01.]

WAC 296-307-55050 Attempt to obtain a material safety data sheet (MSDS) upon request.

The department must:

- Upon receipt of an employer's written request for a material safety data sheet, attempt to obtain the MSDS from the chemical manufacturer, importer, or distributor. When the department receives the MSDS, the department must forward a copy of it to the purchaser at no cost. Small business employers will be given priority for this service.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-55050, filed 08/08/01, effective 09/01/01.]

WAC 296-307-55055 Items or chemicals exempt from the rule, and exemptions from labeling.

- Listed below are the full descriptions of the items or chemicals that are exempt, or not covered, by this rule:
 - Any consumer product or hazardous substance, defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substance Act (15 U.S.C. 1261 et seq.) respectively, where you can show that it is used in the workplace for the purpose intended by the chemical manufacturer or importer of the product, and the use results in a duration and frequency of exposure that isn't greater than the range of exposures that could reasonably be experienced by consumers when used for the purpose intended.
 - Any hazardous waste, defined by the Hazardous Waste Management Act chapter 70.105 RCW, when subject to regulations issued under that act by the department of ecology, that describes specific safety, labeling, personnel training, and other rules for the accumulation, handling, and management of hazardous waste.
 - Any hazardous waste, defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 et seq.), when subject to regulations issued under that act by the Environmental Protection Agency.
 - Any hazardous substance, defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. 9601 et seq.), when the hazardous substance is the focus of remedial or removal action being conducted under CERCLA in accordance with Environmental Protection Agency regulations.
 - Tobacco or tobacco products.
 - Wood or wood products, including lumber that will not be processed, where the chemical manufacturer or importer can establish that the only hazard they pose to the employees is the potential for flammability or combustibility. Wood or wood products that have been treated with hazardous chemicals covered by this rule, and wood that may be subsequently sawed or cut, generating dust, aren't exempt.
 - Articles, meaning manufactured items other than a fluid or particle that:
 - ♦ Are formed to a specific shape or design during manufacture;
 - ♦ Have end use function(s) dependent in whole or in part upon their shape or design during end use; and

WAC 296-307-55055 (Cont.)

- ◆ Under normal conditions of use, don't release more than very small quantities, for example minute or trace amounts of a hazardous chemical such as emissions from a marking pen or a newly varnished wood chair, and don't pose a physical hazard or health risk to employees.
- Food or alcoholic beverages that are sold, used, or prepared in a retail establishment such as a grocery store, restaurant, or drinking place, and foods intended for personal consumption by employees while in the workplace.
- Any drug, defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.), when it is in solid, final form for direct administration to the patient (for example, tablets or pills); drugs that are packaged by the chemical manufacturer for sale to consumers in a retail establishment (for example over-the-counter drugs); and drugs intended for personal consumption by employees while in the workplace (for example, first-aid supplies). Aerosolized or cytotoxic drugs administered by a health care worker aren't excluded.
- Cosmetics packaged for sale to consumers in a retail establishment, and cosmetics intended for personal consumption by employees while in the *workplace*.
- Ionizing and nonionizing radiation.
- Biological hazards.
- This rule doesn't require labeling of the following chemicals:
 - Any pesticide, defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.), when subject to the labeling requirements of that act and labeling regulations issued under that act by the Environmental Protection Agency.
 - Any chemical substance or mixture, in the Toxic Substance Control Act (15 U.S.C. 2601 et seq.), when subject to the labeling requirements of that act, and labeling requirements issued under that act by the Environmental Protection Agency.
 - Any food, food additive, color additive, drug, cosmetic, or medical/veterinary device or product, including materials intended for use as ingredients in such products (for example, flavors and fragrances), as such terms are defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) or the Virus-Serum Toxin Act of 1913 (21 U.S.C. 151 et seq.) and regulations issued under those acts, when they are subject to the labeling requirements under those acts by either the Food and Drug Administration or the Department of Agriculture.
 - Any distilled spirits (beverage alcohols), wine, or malt beverage intended for nonindustrial use, defined in the Federal Alcohol Administration Act (27 U.S.C. 201 et seq.) and regulations issued under that act, when subject to the labeling requirements of that act and labeling regulations issued under that act by the Bureau of Alcohol, Tobacco, and Firearms.
 - Any consumer product or hazardous substance, as defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, when subject to a consumer product safety rule or labeling requirement of those acts, or regulations issued under those acts by the Consumer Product Safety Commission.
 - Agricultural or vegetable seed treated with pesticides and labeled in accordance with the Federal Seed Act (7 U.S.C. 1551 et seq.), and the labeling requirements issued under that act by the Department of Agriculture.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-55055, filed 08/08/01, effective 09/01/01.]

WAC 296-307-55060 Definitions.**Chemical**

Any element, chemical compound, or mixture of elements and/or compounds.

Chemical manufacturer

An employer with a workplace where one or more chemicals are produced for use or distribution.

Chemical name

The scientific designation of a chemical in accordance with one of the following:

- The nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC)
- The chemical abstracts service (CAS) rules of nomenclature
- OR**
- A name which will clearly identify the chemical for the purpose of conducting a hazard evaluation.

Combustible liquid

A combustible liquid has a flashpoint of at least 100°F (37.8°C) and below 200°F (93.3°C). Mixtures with at least 99% of their components having flashpoints of 200°F (93.3°C) or higher aren't considered combustible liquids.

Commercial account

An arrangement in which a retail distributor sells hazardous chemical(s) to an employer, generally in large quantities over time, and/or at costs that are below the regular retail price.

Common name

Any designation or identification such as:

- Code name
- Code number
- Trade name
- Brand name
- Generic name used to identify a chemical other than by its chemical name.

Compressed gas

A gas or mixture of gases that, when in a container, has an absolute pressure exceeding:

- 40 psi at 70°F (21.1°C)
- OR**
- 104 psi at 130°F (54.4°C) regardless of the pressure at 70°F (21.1°C)

Compressed gas can also mean a liquid with a vapor pressure that exceeds 40 psi at 100°F (37.8°C).

Container

Any container, except for pipes or piping systems, that contains a hazardous chemical. It can be any of the following:

- Bag
- Barrel
- Bottle
- Box
- Can
- Cylinder
- Drum
- Reaction vessel
- Storage tank.

WAC 296-307-55060 (Cont.)

Designated representative

- Any individual or organization to which an employee gives written authorization.
- A recognized or certified collective bargaining agent without regard to written employee authorization.
- The legal representative of a deceased or legally incapacitated employee.

Director

The director means the director of the department of labor and industries or their designee.

Distributor

A business, other than a chemical manufacturer or importer, that supplies hazardous chemicals to other distributors or to employers. See WAC 296-62-054 for requirements dealing with manufacturers, distributors and importers - hazard communication.

Employee

The term employee and other terms of like meaning, unless the context of the provision containing such term indicates otherwise, means an employee of an employer who is employed in the business of his or her employer whether by way of manual labor or otherwise and every person in this state who is engaged in the employment of or who is working under an independent contract the essence of which is personal labor for an employer under this standard whether by way of manual labor or otherwise.

Employer

An employer is any person, firm, corporation, partnership, business trust, legal representative, or other business entity which engages in any business, industry, profession, or activity in this state and employs one or more employees or who contracts with one or more persons, the essence of which is the personal labor of such person or persons and includes the state, counties, cities, and all municipal corporations, public corporations, political subdivisions of the state, and charitable organizations: Provided, That any persons, partnership, or business entity not having employees, and who is covered by the Industrial Insurance Act must be considered both an employer and an employee.

Explosive

A chemical that causes a sudden, almost instant release of pressure, gas, and heat when exposed to a sudden shock, pressure, or high temperature.

Exposure or exposed

An employee has been, or may have possibly been, subjected to a hazardous chemical, toxic substance or harmful physical agent while working. An employee could have been exposed to hazardous chemicals, toxic substances, or harmful physical agents in any of the following ways:

- Inhalation
- Ingestion
- Skin contact
- Absorption
- Related means.

The terms exposure and exposed only cover workplace exposure involving a toxic substance or harmful physical agent in the workplace different from typical nonoccupational situations in the way it is:

- Used
- Handled
- Stored
- Generated
- **OR**
- Present.

WAC 296-307-55060 (Cont.)**Flammable**

A chemical covered by one of the following categories:

- Aerosol flammable means an aerosol that, when tested by the method described in 16 CFR 1500.45 yields either a flame projection more than 18 inches at full valve opening or a flashback (a flame extending back to the valve) at any degree of valve opening;
- Gas, flammable means:
 - A gas that, at temperature and pressure of the surrounding area, forms a flammable mixture with air at a concentration of 13% by volume or less; or
 - A gas that, at temperature and pressure of the surrounding area, forms a range of flammable mixtures with air wider than 12% by volume, regardless of the lower limit;
- Liquid, flammable means any liquid having a flashpoint below 100°F (37.8°C), except any mixture having components with flashpoints of 100°F (37.8°C) or higher, the total of which make up 99% or more of the total volume of the mixture.
- Solid, flammable means a solid, other than a blasting agent or explosive as defined in WAC 296-52-417 or 29 CFR 1910.109(a), that is likely to cause fire through friction, moisture absorption, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily. Solid, inflammable also means that when the substance is ignited, it burns so powerfully and persistently that it creates a serious hazard. A chemical must be considered to be a flammable solid if, when tested by the method described in 16 CFR 1500.44, it ignites and burns with a self-sustained flame at a rate greater than one-tenth of an inch per second along its major axis.

Flashpoint

- The minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite when tested by any of the following measurement methods:
 - Tagliabue closed tester: (See American National Standard Method of Test for Flash Point by Tag Closed Tester, Z11.24-1979 (ASTM D 56-79)) for liquids with a viscosity of less than 45 Saybolt Universal Seconds (SUS) at 100°F (37.8°C), that don't contain suspended solids and don't have a tendency to form a surface film under test; or
 - Pensky-Martens closed tester: (See American National Standard Method of Test for Flash Point by Pensky-Martens Closed Tester, Z11.7-1979 (ASTM D 93-79)) for liquids with a viscosity equal to or greater than 45 SUS at 100°F (37.8°C), or that contain suspended solids, or that have a tendency to form a surface film under test; or
 - Setaflash closed tester: (See American National Standard Method of Test for Flash Point by Setaflash Closed Tester (ASTM D 3278-78).)

Note: Organic peroxides, which undergo auto accelerating thermal decomposition, are excluded from any of the flashpoint measurement methods specified above.

Foreseeable emergency

Any potential event that could result in an uncontrolled release of a hazardous chemical into the workplace. Examples of foreseeable emergencies include equipment failure, rupture of containers, or failure of control equipment.

Hazardous chemical

Any chemical that is a physical or health hazard.

Hazard warning

Can be a combination of words, pictures, symbols, or combination appearing on a label or other appropriate form of warning which shows the specific physical and health hazard(s), including target organ effects, of the chemical(s) in the container(s).

Note: See definition for physical hazard and health hazard to determine which hazards must be covered.

WAC 296-307-55060 (Cont.)**Health hazard**

Any chemical with the potential to cause acute or chronic health effects in exposed employees. The potential must be statistically significant based on evidence from at least one study conducted under established scientific principles. Health hazards include:

- Chemicals which are carcinogens
- Toxic or highly toxic agents
- Reproductive toxins
- Irritants
- Corrosives
- Sensitizers
- Hepatotoxins
- Nephrotoxins
- Neurotoxins
- Agents which act on the hematopoietic system
- Agents which damage the lungs, skin, eyes, or mucous membranes.

See WAC 296-62-054 for more definitions and explanations about the scope of health hazards covered by this part. See WAC 296-62-054 for the criteria used for determining whether or not a chemical is considered hazardous for purposes of this rule.

Identity

Any chemical or common name listed on the material safety data sheet (MSDS) for the specific chemical. Each identity used must allow cross-references among the:

- Required list of hazardous chemicals
- Chemical label
- MSDSs.

Importer

The first business within the customs territory of the USA that:

- Receives hazardous chemicals produced in other countries
- AND**
- Supplies them to distributors or employers within the USA.

See WAC 296-62-054 for requirements dealing with manufacturers, importers and distributors-hazard communication.

Material safety data sheet (MSDS)

Written or printed material that tells you about the chemical(s), what it can do to and how to protect yourself, others, or the environment.

For requirements for developing MSDSs see WAC 296-62-054-manufacturers, importers, and distributors-hazard communication.

Mixture

Any combination of 2 or more chemicals (if that combination didn't result from a chemical reaction).

Organic peroxide

This is an organic compound containing the bivalent-O-O-structure. It may be considered a structural derivative of hydrogen peroxide if one or both of the hydrogen atoms has been replaced by an organic radical.

Oxidizer

A chemical other than a blasting agent or explosive as defined in WAC 296-52-417 or CFR 1910.109(a), that starts or promotes combustion in other materials, causing fire either of itself or through the release of oxygen or other gases.

WAC 296-307-55060 (Cont.)**Permissible exposure limits (PELs)**

PELs are airborne concentrations of substances measured by their concentration in the air no matter what amount is breathed by the employee. The permissible exposure limits (PELs) must include the following four categories:

- Permissible exposure limits - Time-weighted average (PEL-TWA) is the time-weighted average airborne exposure to any 8-hour work shift of a 40-hour work week and must not be exceeded.
- Permissible exposure limits - Short-term exposure limit (PEL-STEL) is the employee's 15-minute time-weighted average exposure which must not be exceeded at any time during a work day unless another time limit is specified in a parenthetical notation below the limit. If another time period is specified, the time-weighted average exposure over that time period must not be exceeded at any time during the working day.
- Permissible exposure limits - Ceiling (PEL-C) is the employee's exposure which must not be exceeded during any part of the work day. If instantaneous monitoring isn't feasible, then the ceiling must be assessed as a 15-minute time-weighted average exposure which must not be exceeded at any time over a working day.
- Skin notation is the potential contribution to the overall employee exposure by the cutaneous route including mucous membranes and eye, either by airborne, or more particularly, by direct contact with the substance. These substances are identified as having a skin notation in the OSHA and WISHA PEL tables (29 CFR Part 1910 Subpart Z and WAC 296-62-075, respectively).

Physical hazard

A chemical that has scientifically valid evidence to show it is one of the following:

- Combustible liquid
- Compressed gas
- Explosive
- Flammable
- Organic peroxide
- Oxidizer
- Pyrophoric
- Unstable (reactive)
- Water reactive.

Produce

Any one of the following:

- Manufacture
- Process
- Formulate
- Blend
- Extract
- Generate
- Emit
- Repackage.

Purchaser

An employer who buys one or more hazardous chemicals to use in their workplace.

Pyrophoric

A chemical is pyrophoric if it will ignite spontaneously in the air when the temperature is 130°F (54.4°C) or below.

Responsible party

Someone who can provide appropriate information about the hazardous chemical and emergency procedures.

WAC 296-307-55060 (Cont.)**Specific chemical identity**

This term applies to chemical substances. It can mean the:

- Chemical name
- Chemical abstracts service (CAS) registry number
- Any other information that reveals the precise chemical designation of the substance.

Trade secret

Any confidential:

- Formula
- Pattern
- Process
- Device
- Information
- Collection of information.

The trade secret is used in an employer's business and gives an opportunity to gain an advantage over competitors who don't know or use it.

See **WAC 296-62-053** for requirements dealing with trade secrets.

Unstable (reactive)

An unstable or reactive chemical is one that in its pure state, or as produced or transported, will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shocks, pressure or temperature.

Use

Means to:

- Package
- Handle
- React
- Emit
- Extract
- Generate as a by-product
- Transfer.

Water-reactive

A water-reactive chemical reacts with water to release a gas that is either flammable or presents a health hazard.

Work area

A room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

Workplace

The term workplace means an establishment, job site, or project, at one geographical location containing one or more work areas.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-55060, filed 08/08/01, effective 09/01/01.]

MATERIAL SAFETY DATA SHEETS AND LABEL PREPARATION

WAC 296-307-560 Scope. This chapter sets minimum requirements for content and distribution of material safety data sheets (MSDSs) and labels for hazardous chemicals.

- This chapter applies when you do **one or more** of the following:
 - Import, produce, or repackage chemicals, including manufactured items (such as bricks, welding rods, and sheet metal) that aren't exempt as articles
 - Sell or distribute hazardous chemicals to manufacturers, distributors or employers
 - Choose not to rely on material safety data sheets (MSDSs) provided by the importer, manufacturer or distributor.

Note:

- You aren't required to evaluate chemicals or create MSDSs for chemicals you didn't produce or import. If you decide to evaluate chemicals or create MSDSs, then the requirements of this chapter will apply to you.
- Use Table 2 to determine which sections in this chapter apply to your workplace.

Exemptions:

- All of the following are **always** exempt from this chapter:
 - Ionizing and nonionizing radiation
 - Biological hazards
 - Tobacco and tobacco products.
- The chemicals and items listed in Table 1 are exempt from this chapter **under the conditions specified.**

WAC 296-307-560 (Cont.)

Table 1 Conditional Exemptions from this chapter	
This chapter does NOT apply to	When
<ul style="list-style-type: none"> Alcoholic beverages OR Foods 	<ul style="list-style-type: none"> Sold, used, or prepared in a retail establishment (such as a grocery store, restaurant, bar, or tavern)
<ul style="list-style-type: none"> An article (manufactured item) 	<ul style="list-style-type: none"> It isn't a fluid or particle AND It is formed to a specific shape or design during manufacture for a particular end use function¹ AND It releases only trace amounts of a hazardous chemical during normal use AND doesn't pose a physical or health risk to the employees
<ul style="list-style-type: none"> Consumer products <ul style="list-style-type: none"> - Produced or distributed for sale meeting the definition of consumer products in the Consumer Product Safety Act (see U.S. Code, Title 15, Chapter 47, section 2052²) OR Hazardous household products <ul style="list-style-type: none"> - Meeting the definition of hazardous substances in the Federal Hazardous Substance Act (see U.S. Code, Title 15, Chapter 30, section 1261²) 	<ul style="list-style-type: none"> Both criteria apply: <ul style="list-style-type: none"> - They are used in the workplace for the same purpose as intended by the manufacturer or importer - The duration and frequency of an employee's exposure is no more than the range of exposures that consumers might reasonably experience
<ul style="list-style-type: none"> Cosmetics 	<ul style="list-style-type: none"> Packaged and sold in retail establishments
<ul style="list-style-type: none"> Drugs <ul style="list-style-type: none"> - Meeting the definition for drugs in the Federal Food, Drug, and Cosmetic Act (see U.S. Code, Title 21, Chapter 9, subchapter II, section 321²) 	<ul style="list-style-type: none"> In solid, final form (for example, tablets, or pills) for direct administration to the patient OR Packaged and sold in retail establishments (for example, over-the-counter drugs) OR Intended for employee consumption while in the workplace (for example, first-aid supplies)
<ul style="list-style-type: none"> Hazardous solid wastes <ul style="list-style-type: none"> - Meeting the definition of hazardous wastes in the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (see U.S. Code, Title 42, Chapter 82, Subchapter I, section 6903²) 	<ul style="list-style-type: none"> Subject to the United States Environmental Protection Agency (EPA) regulations³
<ul style="list-style-type: none"> Hazardous substances <ul style="list-style-type: none"> - Released into the environment meeting the definition of hazardous substances in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see U.S. Code, Title 42, Chapter 103, Subchapter I, section 9601²) 	<ul style="list-style-type: none"> They are the focus of remedial or removal action being conducted under CERCLA in accordance with EPA regulations (Title 40 of the Code of Federal Regulations (CFR)³)
<ul style="list-style-type: none"> Hazardous wastes <ul style="list-style-type: none"> - Meeting the definition of dangerous wastes in the Hazardous Waste Management Act (see chapter 70.105 RCW⁴) 	<ul style="list-style-type: none"> Subject to department of ecology regulations, chapter 173-303 WAC⁵, that address the accumulation, handling and management of hazardous waste, and describe all of the following: <ul style="list-style-type: none"> - Safety - Labeling - Personnel training - And other related requirements
<ul style="list-style-type: none"> Solid wood OR Wood products (for example, lumber, and paper) 	<ul style="list-style-type: none"> All of the following apply: <ul style="list-style-type: none"> - The material isn't treated with hazardous chemicals - The only hazard is potential flammability or combustibility - The product isn't expected to be processed (for example, by sanding or sawing)

WAC 296-307-560 (Cont.)

¹End use is dependent in whole, or in part, upon maintaining the item's original shape or design. If the item will be significantly altered from its original form, it can no longer be considered a manufactured item.

²This federal act is included in the United States Code. See <http://www.access.gpo.gov/uscode/uscmmain.html>.

³EPA regulations are included in the Code of Federal Regulations (CFR). See <http://www.epa.gov>.

⁴This state act is included in the Revised Code of Washington (RCW). The RCW compiles all permanent laws of the state. See <http://www.leg.wa.gov/wsladm/default.htm>.

⁵See <http://www.ecy.wa.gov>.

Use Table 2 to find out which sections of this chapter apply to you. For example, if you import **AND** sell hazardous chemicals **ALL** sections apply. WAC 296-307-56050 applies to all employers covered by the scope of this chapter.

Table 2 Section Application				
If you	Then the sections marked with an X apply			
	56010 - 56015	56025	56030 - 56035	56045
<ul style="list-style-type: none"> Import or produce chemicals 	X	X		
<ul style="list-style-type: none"> Sell or distribute hazardous chemicals to <ul style="list-style-type: none"> - Manufacturers OR - Distributors OR - Employers (includes retail or wholesale transactions) 			X	X
<ul style="list-style-type: none"> Choose to NOT rely on MSDSs provided by the importer, manufacturer or distributor 	X	X		

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-560, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56005 Hazard evaluation.

Your responsibility:

To make sure the hazardous chemicals are identified.

You must:

Conduct complete hazard evaluations

WAC 296-307-56010

Provide access to hazard evaluation procedures

WAC 296-307-56015.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56005, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56010 Conduct complete hazard evaluations.

Important:

- Hazard evaluation is a process where hazards of chemicals are identified by reviewing available research or testing information. You aren't required to perform your own laboratory research or testing to meet the requirements of this section
 - Information from hazard evaluations is used to complete material safety data sheets (MSDSs) and labels
 - MSDSs from your suppliers may be used to complete the hazard evaluation for chemicals you produce
 - MSDSs and labels are **NOT** required for chemicals that are determined to be nonhazardous
- Importers and manufacturers are required to develop MSDSs and labels. If you decide to develop your own MSDSs and labels, then this chapter also applies to you.

You must:

- (1) Describe in writing your procedures for conducting hazard evaluations.
- (2) Conduct a complete hazard evaluation for **ALL** chemicals you produce or import to determine if they are hazardous chemicals.
 - Identify and consider available scientific evidence of health and physical hazards
 - Evidence that meets the criteria in Table 3 must be used to establish a hazard
 - Chemicals identified in a Table 4 source must be regarded as hazardous
 - The scope of health hazards considered must include the categories in Tables 5 and 6
 - If the chemical is a mixture, follow the additional criteria in Table 7
 - If you find evidence that meets the criteria in Table 3, use it in your hazard evaluation.

WAC 296-307-56005 (Cont.)

Table 3 Criteria for Hazard Evidence	
Hazard	Criteria
<ul style="list-style-type: none"> Health hazard 	<ul style="list-style-type: none"> Where available, use human case reports of health effects AND One of more studies that <ul style="list-style-type: none"> - Are based on human populations, if available, and animal populations ^{1,2} AND <ul style="list-style-type: none"> - Report statistically significant conclusions of a hazardous effect or health hazard (as defined in this rule) AND <ul style="list-style-type: none"> - Have been conducted following established scientific principles.
<ul style="list-style-type: none"> Physical hazard 	<ul style="list-style-type: none"> Valid evidence that shows a chemical in any one of the following³: <ul style="list-style-type: none"> - A combustible liquid - A compressed gas - Explosive - Flammable - An organic peroxide - An oxidizer - Pyrophoric - Unstable (reactive) - Water-reactive

¹If human data isn't available, use results of tests done on animals and other available studies to predict health effects on employees (for example, effects resulting from short and long-term exposures to chemicals).

²In vitro studies alone don't generally form the basis of a finding of hazard.

³These terms are defined in WAC 296-307-56050.

Chemicals identified in the sources listed in Table 4 must be assumed to be hazardous (including carcinogens and potential carcinogens).

Table 4 Information Sources Identifying Hazardous Chemicals	
<ul style="list-style-type: none"> Sources that address a broad range of hazard categories: <ul style="list-style-type: none"> - Chapter 296-62 WAC, General Occupational Health Standards, WISHA - 29 CFR Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA) - <i>Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment</i>, American Conference of Governmental Industrial Hygienists (ACGIH) (latest edition). Sources that identify carcinogens or potential carcinogens: <ul style="list-style-type: none"> - Chapter 296-62 WAC, General Occupational Health Standards, WISHA - 29 CFR Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA) - National Toxicology Program (NTP), Annual Report on Carcinogens (latest edition) - International Agency for Research on Cancer (IARC) Monographs (latest editions). <p><i>Note:</i> The <i>Registry of Toxic Effects of Chemical Substances</i> is published by the National Institute for Occupational Safety and Health (NIOSH) and identifies chemicals found to be potential carcinogens by the NTP and IARC.</p>	

WAC 296-307-56010 (Cont.)

Chemicals meeting Table 5 definitions, along with the criteria for established evidence in Table 3, must be regarded as hazardous.

Table 5 is NOT intended to present all hazard categories or test methods. Available scientific data involving other test methods and animal species must also be evaluated to determine a chemical's hazards.

Table 5 Standard Health Hazard Categories	
A chemical is considered to be	If
<ul style="list-style-type: none"> A carcinogen 	<ul style="list-style-type: none"> The International Agency for Research on Cancer (IARC) considers it to be a carcinogen or potential carcinogen OR The National Toxicity Program (NTP) (latest edition) lists it as a carcinogen or potential carcinogen OR It is regulated by WISHA or OSHA as a carcinogen
<ul style="list-style-type: none"> Corrosive 	<ul style="list-style-type: none"> It causes visible destruction of, or irreversible alterations in, living tissue (not inanimate surfaces) by chemical action at the site of contact Example: <ul style="list-style-type: none"> - A chemical is corrosive if tested on the intact skin of albino rabbits by a method described by the U.S. Department of Transportation (in Appendix A to 49 CFR Part 173) and it destroys or changes (irreversibly) the structure of the tissue at the contact site after a 4-hour exposure period
<ul style="list-style-type: none"> Toxic 	<ul style="list-style-type: none"> It has a median lethal dose (LD50) greater than 50 milligrams per kilogram, but no more than 500 milligrams per kilogram of body weight, when administered orally to albino rats weighing between 200 -300 grams each OR It has a median lethal dose (LD50) greater than 200 milligrams per kilogram, but not more than 1,000 milligrams per kilogram, of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between 2-3 kilograms each OR
	<ul style="list-style-type: none"> It has a median lethal concentration (LC50), in air:

WAC 296-307-56010 (Cont.)

	<ul style="list-style-type: none"> - Greater than 200 parts per million, but not more than 2,000 parts per million (by volume of gas or vapor) <p>OR</p> <ul style="list-style-type: none"> - Greater than 2 milligrams per liter, but not more than 20 milligrams per liter, of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats, weighing between 200-300 grams each
<ul style="list-style-type: none"> • Highly toxic 	<ul style="list-style-type: none"> • It has a median lethal dose (LD50) of 50 milligrams, or less, per kilogram of body weight when administered orally to albino rats weighing between 200-300 grams each <p>OR</p> <ul style="list-style-type: none"> • It has a median lethal dose (LD50) of 200 milligrams, or less, per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between 2-3 kilograms each <p>OR</p> <ul style="list-style-type: none"> • It has a median lethal concentration of (LC50), in air, of: <ul style="list-style-type: none"> - 200 parts per million (by volume), or less, of gas or vapor <p>OR</p> <ul style="list-style-type: none"> - 2 milligrams per liter, or less, of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200-300 grams each
<ul style="list-style-type: none"> • An irritant 	<ul style="list-style-type: none"> • It is NOT corrosive, but causes a reversible inflammatory effect on living tissue by chemical action at the contact site <p>Examples:</p> <ul style="list-style-type: none"> - The chemical is a skin irritant when tested on the intact skin of albino rabbits (by the methods of 16 CFR 1500.41) for 4 hours exposure (or by other appropriate techniques), and the exposure results in an empirical score of 5 or more - A chemical is an eye irritant if so determined under the procedure listed in 16 CFR 1500.42 or other appropriate techniques
<ul style="list-style-type: none"> • A sensitizer 	<ul style="list-style-type: none"> • It causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure

Categories provided in Table 6 illustrate the broad range of target organ effects that must be considered when conducting hazard evaluations. Chemicals meeting Table 6 definitions, along with the criteria for established evidence in Table 3, must be regarded as hazardous.

Examples provided in Table 6 are **NOT** intended to be a complete list.

WAC 296-307-56010 (Cont.)

Table 6 Examples of Target Organ Effect Categories Category			
Category	Definition	Examples of signs and symptoms	Examples of Chemicals
Hepatotoxins	Cause liver damage	<ul style="list-style-type: none"> • Jaundice • Liver enlargement 	<ul style="list-style-type: none"> • Carbon tetrachloride • Nitrosamines
Nephrotoxins	Cause kidney damage	<ul style="list-style-type: none"> • Edema • Proteinuria 	<ul style="list-style-type: none"> • Halogenated hydrocarbons • Cadmium
Neurotoxins	Cause primary toxic effects on the nervous system	<ul style="list-style-type: none"> • Narcosis • Behavioral changes • Decrease in motor functions 	<ul style="list-style-type: none"> • Mercury • Carbon disulfide • Lead
Chemicals that act on the <ul style="list-style-type: none"> • Blood OR <ul style="list-style-type: none"> • Hematopoietic (blood forming) system 	<ul style="list-style-type: none"> • Decrease hemoglobin function OR <ul style="list-style-type: none"> • Deprive the body tissues of oxygen 	<ul style="list-style-type: none"> • Cyanosis • Loss of consciousness 	<ul style="list-style-type: none"> • Carbon monoxide • Cyanides • Benzene
Chemicals that damage the lungs	<ul style="list-style-type: none"> • Irritate lungs OR <ul style="list-style-type: none"> • Damage pulmonary tissue 	<ul style="list-style-type: none"> • Cough • Tightness in chest • Shortness of breath 	<ul style="list-style-type: none"> • Silica • Asbestos
Reproductive toxins	Affect reproductive capabilities, including: <ul style="list-style-type: none"> • Chromosomal damage (mutation) • Effects on fetuses (teratogenesis) 	<ul style="list-style-type: none"> • Birth defects • Sterility 	<ul style="list-style-type: none"> • Lead • 1,2-Dibromo-3-chloropropane (DBCP) • Nitrous oxide
Cutaneous (skin) hazards	Affect the dermal layer of the body	<ul style="list-style-type: none"> • Defatting of the skin • Rashes • Irritation 	<ul style="list-style-type: none"> • Ketones • Chlorinated compounds
Eye hazards	Affect the eye or ability to see	<ul style="list-style-type: none"> • Conjunctivitis • Corneal damage 	<ul style="list-style-type: none"> • Organic solvents • Acids

Table 7 Criteria for Evaluating Chemical Mixtures	
If a mixture	Then
<ul style="list-style-type: none"> • Has been thoroughly tested as a whole for a physical or health hazard 	<ul style="list-style-type: none"> • You must use those results
<ul style="list-style-type: none"> • Has NOT been tested as a whole for a health hazard 	<ul style="list-style-type: none"> • You must: <ul style="list-style-type: none"> - Evaluate EACH ingredient in the mixture to determine the hazards - Consider the mixture to have the same hazards as each ingredient determined to be hazardous
<ul style="list-style-type: none"> • Has NOT been tested as a whole for physical hazards 	<ul style="list-style-type: none"> • You must: <ul style="list-style-type: none"> - Use any scientifically valid data available to evaluate the potential physical hazards of the mixture

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56010, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56015 Provide access to hazard evaluation procedures.

You must:

- Provide access to your written hazard evaluation procedures when requested by any of the following:
 - Employees
 - Designated representatives of employees
 - Representatives of the Department of Labor and Industries
 - Representatives of the National Institute for Occupational Safety and Health (NIOSH).

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56015, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56020 Material safety data sheets.

Your responsibility:

To provide complete and accurate material safety data sheets (MSDSs).

You must:

Develop or obtain MSDSs
WAC 296-307-56025

Provide MSDSs
WAC 296-307-56030

Follow-up if an MSDS isn't provided
WAC 296-307-56035.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56020, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56025 Develop or obtain material safety data sheets (MSDSs).

You must:

- Develop or obtain a complete and accurate material safety data sheet (MSDS) for each hazardous chemical or mixture according to ALL of the following:
 - ALL information in Table 8 must be completed. If there is no relevant information for a required item, this must be noted. Blank spaces aren't permitted.

Note:

- No specific format is required for MSDSs; however, an example format (OSHA form 174) can be found online at: <http://www.osha.gov>
- One MSDS can be developed for a group of complex mixtures (for example, jet fuels or crude oil) IF the health and physical hazards of the mixtures are similar (the amounts of chemicals in the mixture may vary).
 - Content of MSDSs must accurately represent the available scientific evidence.

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Note: You may report results of scientifically valid studies that tend to refute findings of hazards.

- MSDSs must be in English.

Note: You may develop copies of MSDSs in other languages.

You must:

- Revise an MSDS when you become aware of new and significant information regarding the hazards of a chemical, or how to protect against the hazards
 - Within 3 months after you first become aware of the information
 - OR**
 - Before the chemical is reintroduced into the workplace if the chemical is no longer being used, produced or imported.

Table 8 Information Required on MSDSs	
•	The chemical's identity as it appears on the label
•	The date the MSDS was prepared or updated
•	A contact for additional information about the hazardous chemical and appropriate emergency procedures Include the following <ul style="list-style-type: none"> - Name - Address - Telephone number of the responsible party preparing or distributing the MSDS
•	The chemical's hazardous ingredients ¹ as determined by your hazard evaluation <ul style="list-style-type: none"> - For a single substance chemical, include the chemical and common name(s) of the substance - For mixtures tested as a whole <ul style="list-style-type: none"> ◆ Include the common name(s) of the mixture AND ◆ List the chemical and common name(s) of ingredients that contribute to the known hazards - For mixtures NOT tested as a whole, list the chemical and common name(s) of hazardous ingredients <ul style="list-style-type: none"> ◆ That make up 1% or more of the mixture, by weight or volume, including carcinogens (if 0.1% concentration or more, by weight or volume) - If ingredients are less than the above concentrations but may present a health risk to employees (for example, allergic reaction or exposure could exceed the permissible exposure limits, or PEL) they must be listed here.
•	Exposure limits for airborne concentrations. Include ALL of the following, when they exist: <ul style="list-style-type: none"> - WISHA or OSHA PELs² <ul style="list-style-type: none"> ◆ The 8-hour time weighted average (TWA) ◆ The short-term exposure limit (STEL), if available ◆ Ceiling values, if available - Threshold limit values (TLVs) including 8-hour TWAs, STELs, and ceiling values - Other exposure limits used or recommended by the employer preparing the MSDS
•	Physical and chemical characteristics <ul style="list-style-type: none"> - For example, boiling point, vapor pressure, and odor

WAC 296-307-56025 (Cont.)

<ul style="list-style-type: none"> • Fire, explosion data, and related information <ul style="list-style-type: none"> - For example, flashpoint, flammable and explosion limits, extinguishing media, and unusual fire or explosion hazards
<ul style="list-style-type: none"> • Physical hazards of the chemical including reactivity information <ul style="list-style-type: none"> - For example, incompatibilities, decomposition products, by-products, and conditions to avoid
<ul style="list-style-type: none"> • Health hazard information including ALL of the following: <ul style="list-style-type: none"> - Primary routes of exposure • For example, inhalation, ingestion, and skin absorption or other contact³ <ul style="list-style-type: none"> - Health effects (or hazards) associated with: <ul style="list-style-type: none"> ◆ Short-term exposure⁴ AND ◆ Long-term exposure⁴ - Whether the chemical is listed or described as a carcinogen or potential carcinogen in the latest editions of each of the following: <ul style="list-style-type: none"> ◆ The National Toxicology Program (NTP) Annual Report on Carcinogens OR ◆ The International Agency for Research on Cancer (IARC) Monographs as a potential carcinogen OR ◆ WISHA or OSHA rules - Signs and symptoms of exposure³ - Medical conditions generally recognized as being aggravated by exposure
<ul style="list-style-type: none"> • Emergency and first-aid procedures
<ul style="list-style-type: none"> • Generally applicable precautions for safe handling and use known to the employer preparing the MSDS <ul style="list-style-type: none"> - For example, appropriate procedures for clean-up of spills and leaks, waste disposal method, precautions during handling and storing
<ul style="list-style-type: none"> • Generally applicable and appropriate control measures known to the employer preparing the MSDS, including ALL of the following <ul style="list-style-type: none"> - Engineering control (for example, general or local exhaust ventilation) - Work practices - Personal protective equipment (PPE) - Personal hygiene practices - Protective measures during repair and maintenance of contaminated equipment

¹The identities of some chemicals may be protected as trade secret information (see chapter 296-62 WAC, Part B-1, Trade Secrets).

²WISHA PEL categories are defined, and values are provided, in chapter 296-62 WAC, Part H.

³A skin notation listed with either an ACGIH TLV or WISHA/OSHA PEL indicates that skin absorption is a primary route of exposure.

⁴Examples of:

- Short-term health effects (or hazards) include eye irritation, skin damage caused by contact with corrosives, narcosis, sensitization, and lethal dose.
- Long-term health effects (or hazards) include cancer, liver degeneration, and silicosis.

⁵Signs and symptoms of exposure to hazardous substances include those that:

- Can be measured such as decreased pulmonary function
- AND**
- Are subjective such as feeling short of breath.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56025, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56030 Provide MSDSs for products shipped, transferred or sold over-the-counter.

You must:

- Provide the correct MSDS to manufacturers, distributors and employers:
 - With the initial shipment or transfer of the product
 - AND
 - With the first shipment or transfer after an MSDS is updated
 - AND
 - Whenever one is requested.

Note:

- MSDSs may be provided separately from containers as long as they are provided before or at the same time as the containers. For example, you may fax, or e-mail the MSDS
- You are **NOT** required to provide MSDSs to retailers who inform you they
 - Don't sell the product to commercial accounts
 - AND
 - Don't open the sealed product containers for use in their workplace.

You must:

Follow the requirements in Table 9 for chemicals sold over-the-counter.

Table 9 Requirements for Chemicals Sold Over the Counter (NOT shipped)	
If you are a	Then
<ul style="list-style-type: none"> • Retail distributor with commercial accounts 	<ul style="list-style-type: none"> • Provide an MSDS to employers with commercial accounts when requested AND • Post a sign, or otherwise inform employers, that MSDSs are available
<ul style="list-style-type: none"> • Retail distributor without commercial accounts 	<ul style="list-style-type: none"> • Provide the employer, when requested, with ALL of the following: <ul style="list-style-type: none"> - Name Address - Telephone number of the chemical manufacturer, importer, or distributor who can provide an MSDS
<ul style="list-style-type: none"> • Wholesale distributor selling products over-the counter to employers 	<ul style="list-style-type: none"> • Provide an MSDS to employers with commercial accounts when requested AND • Post a sign, or otherwise inform employers, that MSDSs are available

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56030, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56035 Follow-up if an MSDS isn't provided.

You must:

- Obtain an MSDS from the chemical manufacturer, distributor or importer as soon as possible, if an MSDS isn't provided for a shipment labeled as a hazardous chemical.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56035, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56040 Labeling.**Your responsibility:**

To provide employers with containers of hazardous chemicals that are properly labeled.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56040, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56045 Label containers of hazardous chemicals.

Exemption: Containers are exempt from this section if ALL hazardous contents are listed in Table 11.

You must:

- Make sure every container of hazardous chemicals leaving the workplace is properly labeled. This includes ALL of the following:
 - The identity of the hazardous chemical (the chemical or common name) that matches the identity used on the MSDS
 - An appropriate hazard warning
 - The name and address of the chemical manufacturer, importer, or other responsible party
 - Make sure labeling doesn't conflict with the requirements of:
 - ♦ The Hazardous Materials Transportation Act (49 U.S.C. 1801 et seq.)
 - AND
 - ♦ Regulations issued under the act by the U.S. Department of Transportation (Title 49 of the Code of Federal Regulations, Parts 171 through 180). See <http://www.dot.gov>
 - Revise labels within 3 months of becoming aware of new and significant information about chemical hazards
 - Provide revised labels on containers beginning with the first shipment after a revision, to manufacturers, distributors or employers
 - Revise the label when a chemical isn't currently used, produced or imported, before:
 - ♦ You resume shipping (or transferring) the chemical
 - OR
 - ♦ The chemical is reintroduced in the workplace
 - Label information
 - ♦ Clearly written in English
 - AND
 - ♦ Prominently displayed on the container.

Reference: Additional labeling requirements for specific hazardous chemicals (for example, asbestos, cadmium, and formaldehyde) are found in chapter 296-62 WAC, General Occupational Health Standards (see parts F, G, I and I-1 of that chapter).

Note: When the conditions specified in Table 10 are met for the solid material products listed, you aren't required to provide labels for every shipment.

WAC 296-307-56045 (Cont.)

Table 10 Labeling for Solid Materials	
You need only send labels with the first shipment, IF the product is	And
Whole grain	<ul style="list-style-type: none"> It is shipped to the same customer AND No hazardous chemicals are part of or known to be present with the product which could expose employees during handling <ul style="list-style-type: none"> - For example, cutting fluids on solid metal, and pesticides with grain
Solid untreated wood	
Solid metal For example: Steel beams, metal castings	
Plastic items	

Exemptions: The chemicals (and items) listed in Table 11 are **EXEMPT** from **THIS SECTION** under the conditions specified. Requirements in other sections still apply.

WAC 296-307-56045 (Cont.)

<p align="center">Table 11 Conditional Label Exemptions</p>	
This section does not apply to	When the product is
<ul style="list-style-type: none"> Pesticides <ul style="list-style-type: none"> - Meeting the definition of pesticides in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) see Title 7, U.S.C. Chapter 6, Subchapter II, Section 136¹⁾ 	<ul style="list-style-type: none"> Subject to: <ul style="list-style-type: none"> - Labeling requirements of FIFRA¹⁾ AND <ul style="list-style-type: none"> - Labeling regulations issued under FIFRA by the United States Environmental Protection Agency (EPA) (see Title 40 of the Code of Federal Regulations²⁾)
<ul style="list-style-type: none"> A chemical substance or mixture <ul style="list-style-type: none"> - Meeting the definition of chemical substance or mixture in the Toxic Substance Control Act (TSCA) (see Title 15 U.S.C. Chapter 53, Subchapter II, Section 2602¹⁾) 	<ul style="list-style-type: none"> Subject to <ul style="list-style-type: none"> - Labeling requirements of TSCA¹⁾ AND <ul style="list-style-type: none"> - Labeling requirements issued under TSCA by the EPA (see Title 40 of the Code of Federal Regulations²⁾)
<ul style="list-style-type: none"> Each of the following <ul style="list-style-type: none"> - Food - Food additives - Color additives - Drugs - Cosmetics - Medical devices or products - Veterinary devices or products - Materials intended for use in these products (for example: Flavors, and fragrances) As defined in <ul style="list-style-type: none"> - The Federal Food, Drug, and Cosmetic Act (see Title 21 U.S.C. Chapter 9, Subchapter II, (Section 321¹⁾) OR <ul style="list-style-type: none"> - The Virus-Serum Act of 1913 (see Title 21 U.S.C. Chapter 5, Section 151 et seq.¹⁾) OR <ul style="list-style-type: none"> - Regulations issued under these acts (see Title 21 Part 101 in the Code of Federal Regulations, and Title 9, in the Code of Federal Regulations³⁾) 	<ul style="list-style-type: none"> Subject to: <ul style="list-style-type: none"> - Labeling requirements in Federal Food, Drug, and Cosmetic Act, Virus-Serum Toxin Act of 1913, and issued regulations enforced by the United States Food and Drug Administration (see Title 21 Parts 101-180 in the Code of Federal Regulations³⁾) OR <ul style="list-style-type: none"> - Department of Agriculture (see Title 9, in the Code of Federal Regulations³⁾)
<ul style="list-style-type: none"> Each of the following: <ul style="list-style-type: none"> - Distilled spirits (beverage alcohols) AND <ul style="list-style-type: none"> - Wine AND <ul style="list-style-type: none"> - Malt beverage As defined in <ul style="list-style-type: none"> - The Federal Alcohol Administration Act (see Title 27 U.S.C. Section 201¹⁾) AND <ul style="list-style-type: none"> - Regulations issued under this act (see Title 27 in the Code of Federal Regulations³⁾) 	<ul style="list-style-type: none"> Subject to: <ul style="list-style-type: none"> - Labeling requirements of Federal Alcohol Administration Act¹⁾ AND <ul style="list-style-type: none"> - Labeling regulations issued under Federal Alcohol Administration Act by the Bureau of Alcohol, Tobacco, and Firearms (see Title 27 in the Code of Federal Regulations³⁾)

WAC 296-307-56045 (Cont.)

<ul style="list-style-type: none">• Consumer products AND• Hazardous substances<ul style="list-style-type: none">- As defined in the Consumer Product Safety Act (see 15 U.S.C. 2051 et seq.¹)AND<ul style="list-style-type: none">- The Federal Hazardous Substances Act (see 15 U.S.C. 1261 et. seq.¹)	<ul style="list-style-type: none">• Subject to:<ul style="list-style-type: none">- A consumer product safety or labeling requirement of the Consumer Product Safety Act or Federal Hazardous Substance Act¹OR<ul style="list-style-type: none">- Regulations issued under these acts by the Consumer Product Safety Commission (see Title 16 in the Code of Federal Regulations³)
<ul style="list-style-type: none">• Agricultural seed AND• Vegetable seed treated with pesticides	<ul style="list-style-type: none">• Labeled as required by<ul style="list-style-type: none">- The Federal Seed Act (see Title 7 U.S.C. Chapter 37, Section 1551 et. seq.¹)AND<ul style="list-style-type: none">- Labeling requirements issued under Federal Seed Act by the United States Department of Agriculture¹

¹This federal act is included in the United States Code. See <http://www.access.gpo.gov/uscode/uscmmain.html>.

²See <http://www.epa.gov>.

³See <http://www.access.gpo.gov/nara/cfr/index.html>.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56045, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56050 Definitions. The following definitions apply to this chapter:

Article (manufactured item)

A manufactured item that

- Isn't a fluid or particle
AND
- Is formed to a specific shape or design during manufacture for a particular end use function
AND
- Releases only trace amounts of a hazardous chemical during normal use and doesn't pose a physical or health risk to employees.

Chemical

- An element or mixture of elements
OR
- A compound or mixture of compounds
OR
- A mixture of elements and compounds

Included are manufactured items (such as bricks, welding rods and sheet metal) that aren't exempt as an article.

Chemical name

- The scientific designation of a chemical developed by the
 - International union of pure and applied chemistry (IUPAC)
OR
 - Chemical abstracts service (CAS) rules of nomenclature
OR
- A name that clearly identifies the chemical for the purpose of conducting a hazard evaluation.

Combustible liquid

Liquids with a flashpoint of at least 100°F (37.8°C) and below 200°F (93.3°C). A mixture with at least 99% of its components having flashpoints of 200°F (93.3°C), or higher, isn't considered a combustible liquid.

Commercial account

An arrangement where a retailer is selling hazardous chemicals to an employer

- Generally in large quantities over time
OR
- At costs below regular retail price.

Common name

Any designation or identification used to identify a chemical other than the chemical name, such as a

- Code name or number
OR
- Trade or brand name

WAC 296-307-56050 (Cont.)

- **OR**
Generic name.

Compressed gas

- A contained gas or mixture of gases with an absolute pressure greater than:
 - 40 psi at 70°F (21.1°C)
OR
 - 104 psi at 130°F (54.4°C) regardless of the pressure at 70°F (21.1°C)
OR
- A liquid with a vapor pressure greater than 40 psi at 100°F (37.8°C), as determined by ASTM D323-72.

Container

A vessel, other than a pipe or piping system, that holds a hazardous chemical. Examples include:

- Bags
- Barrels
- Bottles
- Boxes
- Cans
- Cylinders
- Drums
- Reaction vessels
- Storage tanks
- Rail cars.

Designated representative

- An individual or organization with written authorization from an employee
OR
- A recognized or certified collective bargaining agent (not necessarily authorized by an employee)
OR
- A legal representative of a deceased or legally incapacitated employee.

Distributor

A business that supplies hazardous chemicals to other employers. Included are employers who conduct retail and wholesale transactions.

Explosive

A chemical that causes a sudden, almost instant release of pressure, gas, and heat when exposed to a sudden shock, pressure, or high temperature.

WAC 296-307-56050 (Cont.)**Flammable**

A chemical in one of the following categories:

- Aerosols that, when tested using a method described in 16 CFR 1500.45, yield either a:
 - Flame projection of more than 18 inches at full valve opening
 - OR**
 - A flashback (a flame extending back to the valve) at any degree of valve opening
- Gases that, at the temperature and pressure of the surrounding area, form a:
 - Flammable mixture with air at a concentration of 13 %, by volume, or less
 - OR**
 - Range of flammable mixtures with air wider than 12 %, by volume, regardless of the lower limit
- Liquids with a flashpoint below 100°F (37.8°C). A mixture with at least 99 % of its components having flashpoints of 100°F (37.8°C), or higher, isn't considered a flammable liquid
- Solids, other than blasting agents or explosives, as defined in WAC 296-52-417 or 29 CFR 1910.109(a), that:
 - Is likely to cause fire through friction, moisture, absorption, spontaneous chemical change or retained heat from manufacturing or processing
 - OR**
 - That can be readily ignited (and when ignited burns so vigorously and persistently that it creates a serious hazard)
 - OR**
 - When tested by the method described in 16 CFR 1500.44, ignite and burn with a self-sustained flame at a rate greater than 1/10th of an inch per second along its major axis.

Flashpoint

The minimum temperature at which a liquid gives off an ignitable concentration of vapor, when tested by any of the following measurement methods:

- Tagliabue closed tester. Use this for liquids with a viscosity less than 45 Saybolt Universal Seconds (SUS) at 100°F (37.8°C), that don't contain suspended solids and don't tend to form a surface film under test. See American National Standard Method of Test for Flashpoint by Tag Closed Tester, Z11.24-1979 (ASTM D 56-79)
- Pensky-Martens closed tester. Use this for liquids with a viscosity equal to, or greater than, 45 SUS at 100°F (37.8°C) or for liquids that contain suspended solids or have a tendency to form a surface film under test. See American National Standard Method of Test for Flashpoint by Pensky-Martens Closed Tester, Z11.7-1979 (ASTM D 93-79)
- Setaflash closed tester. See American National Standard Method of Test for Flashpoint by Setaflash Closed Tester (ASTM D 3278-78)

Organic peroxides, which undergo auto accelerating thermal decomposition, are excluded from any of the flashpoint measurement methods specified above.

WAC 296-307-56050 (Cont.)**Hazardous chemical**

A chemical, which is a physical or health hazard.

Hazard warning

Words, pictures or symbols (alone or in combination) that appear on labels (or other forms of warning such as placards or tags) that communicate specific physical and health hazards (including target organ effects) associated with chemicals in a container.

Health hazard

A chemical that may cause health effects in short or long-term exposed employees based on statistically significant evidence from a single study conducted by using established scientific principles.

Health hazards include, but aren't limited to, any of the following:

- Carcinogens
- Toxic or highly toxic substances
- Reproductive toxins
- Irritants
- Corrosives
- Sensitizers
- Hepatotoxins (liver toxins)
- Nephrotoxins (kidney toxins)
- Neurotoxins (nervous system toxins)
- Substances that act on the hematopoietic system (blood or blood forming system)
- Substances that can damage the lungs, skin, eyes, or mucous membranes.

Identity

A chemical or common name listed on the material safety data sheet (MSDS) and label.

Importer

The first business, within the Customs Territory of the United States, that receives hazardous chemicals produced in other countries and supplies them to manufacturers, distributors or employers within the United States.

Label

Written, printed, or graphic material displayed on, or attached to, a container of hazardous chemicals.

Manufacturer

An employer with a workplace where one or more chemicals (including items not exempt as articles, see Table 1 in this chapter) are produced for use or distribution.

Material safety data sheet (MSDS)

Written, printed or electronic information (on paper, microfiche, or on-screen) that informs manufacturers, distributors or employers about the chemical, its hazards and protective measures as required by this rule.

Mixture

A combination of 2 or more chemicals that retain their chemical identify after being combined.

Organic peroxide

An organic compound containing the bivalent-O-O- structure. It may be considered a structural derivative of hydrogen peroxide if one or both of the hydrogen atoms has been replaced by an organic radical.

WAC 296-307-56050 (Cont.)**Oxidizer**

A chemical, other than a blasting agent or explosive as defined in WAC 296-52-417 or 29 CFR 1910.109(a), that starts or promotes combustion in other materials, causing fire either of itself or through the release of oxygen or other gases.

Permissible exposure limits

See chapter 296-62 WAC Part H, for definition of this term.

Physical hazards

A chemical that has scientifically valid evidence to show it is one of the following:

- A combustible liquid
- A compressed gas
- Explosive
- Flammable
- An organic peroxide
- An oxidizer
- Pyrophoric
- Unstable (reactive)
- Water-reactive.

Produce

To do one or more of the following:

- Manufacture
- Process
- Formulate
- Blend
- Extract
- Generate
- Emit
- Repackage.

Pyrophoric

Chemicals that ignite spontaneously in the air at a temperature of 130°F (54.4°C) or below.

Responsible party

Someone who can provide more information about the hazardous chemical and appropriate emergency procedures.

Retailer

See distributor.

Threshold limit values (TLVs)

Airborne concentrations of substances established by the American Conference of Governmental Industrial Hygienists (ACGIH), and represent conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse health effects.

WAC 296-307-56050 (Cont.)

TLVs are specified in the most recent edition of the *Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices* and include the following categories:

- Threshold limit value-time-weighted average (TLV-TWA)
- Threshold limit value-short-term exposure limit (TLV-STEL)
- Threshold limit value-ceiling (TLV-C).

Unstable (reactive)

A chemical in its pure state, or as produced or transported, that will vigorously polymerize, decompose, condense, or become self-reactive under conditions of shocks, pressure or temperature.

Use

To do one or more of the following:

- Package
- Handle
- React
- Emit
- Extract
- Generate as a by-product
- Transfer.

Water-reactive

A chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

Wholesaler

See distributor.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56050, filed 05/06/03, effective 08/01/03.]

WAC 296-307-570 Lighting rule.

Your responsibility:

- To provide and maintain adequate lighting in your workplace.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-570, filed 08/08/01, effective 09/01/01.]

WAC 296-307-57005 Provide and maintain adequate lighting.

Note: This section establishes minimal levels of lighting for safety purposes only. Guidelines pertaining to optimal levels of lighting and illumination may be found in Practice for Industrial Lighting, ANSI/IES RP7-1979.

You must:

- Provide and maintain adequate lighting for all work activities in your workplace. See the following table.

WAC 296-307-570 (Cont.)

Lighting Table		
Activity	Minimum Acceptable average lighting level in an area:	Any one single measurement used to determine the average lighting level.*can't be less than:
	(Foot-candles)	(Foot-candles)
Indoor task	10	5
Outdoor task	5	2.5
Nontask activities for both indoor and outdoor	3	1.5

- Lighting levels must be measured at thirty inches above the floor/working surface or at the task.

You must:

- Have adequate light for employees to see nearby objects that might be potential hazards or to see to operate emergency controls or other equipment, if general lighting isn't available.

Note:

- Lighting levels can be measured with a light meter.
- Conversion information: 1 foot candle = 1 lumen incident per square foot = 10.76 lux.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-57005, filed 08/08/01, effective 09/01/01.]

WAC 296-307-590 Environmental tobacco smoke in the office.

Your responsibility:

- To control exposure to environmental tobacco smoke in your office work environment

You must:

Control tobacco smoke in your building

WAC 296-307-59005

Control tobacco smoke that comes in from the outside

WAC 296-307-59010

Note: This rule doesn't preempt any federal, state, municipal, or other local authority's regulation of indoor smoking that is more protective than this section.

WAC 296-307-590 (Cont.)**Definitions:**

Office work environment is an indoor or enclosed occupied space where clerical work, administration, or business is carried out.

In addition, it includes:

- Other workplace spaces controlled by the employer and used by office workers, such as cafeterias, meeting rooms, and washrooms.
- Office areas of manufacturing and production facilities, not including process areas.
- Office areas of businesses such as food and beverage establishments, agricultural operations, construction, commercial trade, services, etc.

Smoking

A person is smoking if they are:

- Lighting up
- Inhaling
- Exhaling
- Carrying a pipe, cigar or cigarette of any kind that is burning.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-590, filed 08/08/01, effective 09/01/01.]

WAC 296-307-59005 Control tobacco smoke in your building.

Exemption: The minimum criteria specified in this rule don't apply to outdoor structures provided for smokers such as gazebos or lean-tos.

You must:

- Prohibit smoking in your office work environment
OR
- Restrict smoking inside your office work environment to designated enclosed smoking rooms that meet the following minimum criteria:
 - Identify smoking rooms clearly with signs.
 - Make sure the designated smoking rooms aren't in common areas, such as:
 - ◆ Places where nonsmoking employees are required to work or visit
 - ◆ Restrooms
 - ◆ Washrooms
 - ◆ Hallways
 - ◆ Stairways
 - ◆ Cafeterias/lunchrooms
 - ◆ Meeting rooms
 - Make sure that no employee is required to enter a designated smoking room while someone is smoking there.
 - Conduct cleaning and maintenance work in designated smoking rooms when smokers aren't present.

WAC 296-307-59005 (Cont.)

You must:

- Ventilate designated smoking rooms at a rate of at least 60 cubic feet per minute per smoker (calculated on the basis of the maximum number of smokers expected during the course of a normal working day), which can be supplied by transfer air from adjacent areas.
 - Maintain enough negative air pressure in designated smoking areas to prevent smoke from migrating into nonsmoking areas, at all times.
 - Operate a separate mechanical exhaust system in designated smoking rooms, to make sure exhausted air moves directly outside, and doesn't recirculate into nonsmoking areas.
 - Prohibit use of the designated smoking room if the mechanical exhaust system isn't working properly, until repairs are completed.

Note: This ventilation rate is recommended for occupancies of no more than 7 people for every 100 square feet of net occupied space in the designated smoking room.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-59005, filed 08/08/01, effective 09/01/01.]

WAC 296-307-59010 Control tobacco smoke that comes in from the outside.

You must:

- Use engineering or administrative controls to minimize the amount of tobacco smoke that comes into your office(s) from outside the building.
 - Make sure that outside smoking areas used by your employees aren't close to doorways, air intakes, and other openings that may allow airflow directly into an office.

Note: By changing the way workers do their job, you can reduce work exposure to potential hazards. These changes are called administrative controls and include such things as:

- Job rotation
- Wetting down dusty areas
- Having employees shower after exposure to potentially harmful substances
- Maintaining equipment properly
- Cleaning up work areas to control the effect of potential hazards.

Engineering controls let you plan or physically change the machinery or work environment to prevent employee exposure to potential hazards. This includes any modification of plant equipment, processes, or materials to reduce employees' exposure to toxic materials or harmful physical agents.

[Statutory Authority: RCW 49.17.010, .040, .050. 00-17-033 (Order 01-14), § 296-307-59010, filed 08/08/01, effective 09/01/01.]